

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)

Price Cap Performance Review)
for Local Exchange Carriers)

CC Docket No. 94-1

DOCKET FILE COPY ORIGINAL

COMMENTS OF BELLSOUTH TELECOMMUNICATIONS, INC.

Gary M. Epstein
James H. Barker
LATHAM & WATKINS
Suite 1300
1001 Pennsylvania Ave., N.W.
Washington, D.C. 20004-2505
(202) 637-2200

and

M. Robert Sutherland
Richard M. Sbaratta
4300 Southern Bell Center
675 West Peachtree St., N.E.
Atlanta, Georgia 30375
(404) 335-0757

Counsel for BELLSOUTH TELECOMMUNICATIONS, INC.

A4

Table of Contents

	<u>Page</u>
I. Overview & Executive Summary	1
II. Discussion	6
A. Productivity	6
1. General Comments	6
2. TFP Methodology	9
a. Input Price Differential	14
b. Direct Measurement of LECs' Unit Costs	16
3. Other X-Factor Calculation Methods	24
4. Updating of the X-Factor	29
5. Number of X-Factors	33
B. Sharing Requirements and Alternatives	38
C. Common Line Formula	42
D. Exogenous Costs	43
III. Issues Deferred From the Pricing Flexibility Notice	44
IV. Conclusion	47

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

RECEIVED

In the Matter of)	
)	
Price Cap Performance Review)	CC Docket No. 94-1
for Local Exchange Carriers)	

COMMENTS OF BELL SOUTH TELECOMMUNICATIONS, INC.

BellSouth Telecommunications, Inc. ("BellSouth"), by and through its undersigned attorneys, hereby submits the following Comments in the above-captioned matter.

I. OVERVIEW & EXECUTIVE SUMMARY

In March, 1995, the Commission completed the first phase of its performance review of the LEC price cap plan.^{1/} The Commission revised certain aspects of the plan on an interim basis, and stated that it expected to make additional, long-term changes to the plan after further proceedings.^{2/} In the Fourth Further Notice, the Commission has solicited comment on a variety of issues regarding the methods for establishing price caps for the LECs, including an examination or re-examination of various fundamental elements of the

-
1. Price Cap Performance Review for Local Exchange Carriers, 10 FCC Rcd 8961 (1995) ("First Report and Order"), appeal pending, The Bell Atlantic Telephone Companies v. FCC, No. 95-1217 (and consolidated cases) (D.C. Cir.).
 2. Id. at 8968-69, ¶ 14.

plan -- e.g., productivity measurements, sharing, the common line formula, and exogenous costs.^{3/}

The Commission has long recognized that "the attractiveness of incentive regulation lies in its ability to replicate more accurately than rate of return regulation the dynamic, consumer-oriented process that characterizes a competitive market."^{4/} By "capping" the overall prices that a carrier may charge for its services, the Commission ensures that the carrier's primary means of increasing earnings are to become more efficient and to innovate in the provision of services. Price cap regulation thus breaks the direct link between prices and earnings and curtails the perverse incentives that historically have attended rate of return regulation.^{5/} Price regulation also advances the public interest by affording consumers strong protection against monopoly pricing by establishing maximum aggregate prices for groups of services, but at the same time allowing carriers the flexibility to adjust prices easily as long as prices remain at or below the overall cap -- an essential element for the development of true price competition.^{6/}

-
3. In the Matter of Price Cap Performance Review for Local Exchange Carriers, CC Docket No. 94-1, Fourth Further Notice of Proposed Rulemaking (released Sept. 27, 1995) ("Fourth Further Notice").
 4. In the Matter of Policy and Rules Concerning Rates for Dominant Carriers, CC Docket No. 87-313, Report and Order and Second Further Notice of Proposed Rulemaking, 4 FCC Rcd 2873, 2893, ¶ 36 (1989) ("AT&T Price Cap Order").
 5. Under a pure price caps system -- unlike rate-of-return regulation -- "gold plating" and cross-subsidization do not justify higher prices. Instead, such behavior actively decreases carrier profits, and there is therefore no incentive to engage in it. See AT&T Price Cap Order at 2893, ¶ 36; see also In the Matter of Policy and Rules Concerning Rates for Dominant Carriers, CC Docket No. 87-313, Second Report and Order, 5 FCC Rcd 6786, 6790-91 (1990) ("LEC Price Cap Order").
 6. Other significant advantages of price caps include reduced administrative cost and complexity and more effective policing of shifting industry boundaries. AT&T Price Cap Order at 2893, ¶¶ 36-37. These advantages again flow from the fact that cost allocation requirements do not

Over the past six years, for various major telecommunications industry segments, the Commission has attempted to transition to price regulation from cost-of-service regulation, with varying degrees of success. The Commission initially adopted price regulation for AT&T in 1989,^{7/} and extended price cap regulation to the LECs in 1991.^{8/} The Commission also adopted a price cap plan for non-competitive cable television companies in response to the Cable Act of 1992.^{9/}

The regulation of AT&T under price caps evolved in a logical manner. AT&T was never subject to an earnings sharing mechanism that could have needlessly hampered the operation and effectiveness of the AT&T price cap plan. As market forces constrained AT&T's prices, the Commission removed competitive services from price cap regulation altogether.^{10/} In October, this evolution culminated in the Commission declaring AT&T to be a "non-dominant" carrier. The Commission eliminated price cap regulation entirely for AT&T's remaining interstate, domestic interexchange services.^{11/}

play the central role under price cap regulation that they do under rate-of-return regulation. The restraints on price increases become less significant when competition develops because competitive forces hold prices down.

7. See AT&T Price Cap Order, 4 FCC Rcd 2873 (1989).
8. See LEC Price Cap Order, 5 FCC Rcd 6786 (1990).
9. In the Matter of Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation, MM Docket No. 92-266, Report and Order and Further Notice of Proposed Rulemaking, 8 FCC Rcd 5631 (1993) ("Cable Price Cap Order").
10. See, e.g., In the Matter of Revisions to Price Cap Rules for AT&T Corp., 10 FCC Rcd 3009 (1995) (removing AT&T's commercial services from price cap regulation).
11. See In the Matter of Motion of AT&T to be Reclassified as a Non-Dominant Carrier, FCC 95-427, Order (released Oct. 23, 1995) ("AT&T Non-Dominance Order").

Price caps for AT&T thus were a "way station" along the path from rate of return regulation to non-dominance and deregulation. Price cap regulation for the LECS, however, threatens to veer off in the wrong direction. While the Commission's companion Pricing Flexibility Notice in this proceeding^{12/} correctly attempts to chart the path towards non-dominance and deregulation for the LECs, recent Commission decisions have become increasingly and unnecessarily regulatory in nature. Even as the LECs have introduced new technologies and services, and as competitors increasingly have offered services in competition with them, the Commission has adopted rules and policies that have moved LEC price caps closer to the cost of service model. The Commission has, for example, retained sharing as an interim feature of the LEC price cap plan, notwithstanding the enormous inefficiency and distortion the mechanism introduces into the proper functioning of price caps. The Commission also has continued to impose new basket, band and subindex requirements applicable to individual services, and, in some instances, to rate elements that are merely part of a service. The anomalous effect of such regulations is to restrict LEC pricing flexibility and to reduce economic efficiency at the same time. Many of the Commission's decisions on these issues were made in proceedings involving individual services, with no consideration of their conceptual impact on price cap regulation.

This proceeding affords the Commission an important opportunity to step back

BellSouth urges the Commission to undertake this process recognizing that the continuing development of competition for LEC interstate access services will allow the Commission to lessen -- and ultimately to eliminate -- all price cap regulation. Many of the issues raised for comment in the Fourth Further Notice do not adequately recognize this point. The Commission's laborious attempts to fine tune each aspect of the LEC price cap plan with micro-precision, and the very statement that the changes proposed to the LEC price cap plan are "long-term," do not recognize that the LEC plan should be viewed as interim regulation during the transition to full competition.

As the Commission has acknowledged in the Pricing Flexibility Notice, a properly designed system of price regulation "should facilitate the transition to competition in local and interstate telecommunications markets by offering incentives for incumbents to foster competitive markets for services."^{13/} The Commission should expressly recognize, in resolving the issues in this proceeding, that any regulation in the telecommunications marketplace is interim in nature. Indeed, the pace of change in the telecommunications industry is only increasing. LECs have been subject to price cap regulation for five years. Given the momentum and magnitude of competitive change, it is unlikely that another five years will be required to reach a sufficient level of competition that warrants the elimination of LEC price cap regulation.

In the Comments below, BellSouth urges the Commission to adopt the following general revisions to the LEC price cap plan:

- (1) The USTA Simplified TFP Model -- In Comments being filed today, USTA presents a long-term price cap proposal that calculates a productivity offset based on a moving average TFP methodology. The model utilizes economically meaningful and generally

13. Pricing Flexibility Notice at ¶ 7.

accepted methods for developing input and output indices. It is also designed to be independently verifiable and relies on publicly available data. BellSouth urges the Commission to adopt this methodology, which will ensure that consumers benefit from ongoing LEC productivity gains, and will also preserve the efficiency incentives which underlie the theory of price regulation.

- (2) Single X-Factor -- BellSouth urges the Commission to adopt a single, industry-average X-Factor that is superior to any model of LEC-specific or multiple X-Factors.

Supported by the analysis of Professor Frank M. Gollop of Boston College, BellSouth believes that a single industry X-Factor will induce LECs to maximize their productivity growth, is simple to administer, and will guarantee that ongoing productivity gains by LECs are passed through to ratepayers.

- (3) Elimination of Sharing -- BellSouth agrees with the Commission that sharing has no place in a properly structured price cap plan. Sharing severely reduces LEC incentives to operate efficiently. The Commission's 5-year experience in administering price regulation for both AT&T and the LECs has eliminated the need for this "backstop" mechanism. Moreover, the USTA moving-average TFP approach ensures that productivity gains will flow through to consumers.

BellSouth believes these changes are manifestly in the public interest and should be adopted by the Commission. BellSouth below offers more specific responses to the issues raised in the Fourth Further Notice.

II. DISCUSSION

A. Productivity

1. General Comments

The LEC price cap plan generally rewards or penalizes carriers whose performance exceeds or falls short of the productivity target embodied in the price cap index ("PCI"). The PCI is adjusted

annually based on a measure of inflation that embodies economy-wide productivity gains and price changes, the Gross National Product Price Index ("GNP-PI"), minus a productivity factor.^{14/} This productivity factor, the "X-Factor," in turn reflects the amount by which LEC productivity historically has exceeded that of the economy as a whole, plus a consumer productivity dividend ("CPD") of 0.5%.^{15/} In the original LEC Price Cap Order, the Commission mandated a PCI that included a 3.3% (or an optional 4.3%) X-factor each year.^{16/} In its performance review in the First Report and Order, the Commission adopted interim rules that re-calibrated the minimum X-Factor at 4.0%,^{17/} with two optional X-factors at 4.7% and 5.3%.^{18/} The 5.3% X-Factor was deemed by the Commission to be a sufficiently challenging target for the Commission to eliminate sharing for LECs who chose this option.

-
14. The PCI may also be further adjusted for exogenous cost changes.
 15. Specifically, the X-Factor "is an offset that reflects the fact that telephone carriers historically, have experienced cost changes due to differences in productivity and input prices relative to the economy as a whole, resulting in telephone rate trends being below the level of inflation." First Report and Order, 10 FCC Rcd at 9006, ¶ 99. In 1990, a short-term study examined the productivity trends in interstate access from 1984-1990, and a long-term study covered interstate charges generally for the years 1930 to 1989. The 0.5% CPD was then added to the average value of the two studies to assign the first price cap productivity gains to consumers in the form of lower rates. Id. at ¶ 99, n.160.
 16. LEC Price Cap Order, 5 FCC Rcd 6796. If a LEC elected the 4.3 percent productivity offset, the LEC lowered its price cap index an additional 1 percent permanently but could retain a greater portion of its profits (only for one year) if it could increase its productivity. Id. at 6796, 6799; see also LEC Price Cap Reconsideration Order, 6 FCC Rcd at 2642.
 17. First Report and Order, 10 FCC Rcd at 9054-9056, ¶¶ 210-215. The Commission's recalculation of the minimum X-Factor was based on an alleged "prior error" in its 1990 productivity calculation that involved the use of controversial access price data from the 1984-85 tariff year in one of the key productivity studies that resulted in the Commission's selection of a 3.3% X-Factor (the notorious "1984 data point"). Originally, the Commission used the 1984 Data Point in its productivity calculation, but after assessing LEC performance since 1990, the Commission recently reversed its position and decided that this data should not have been included after all. The Commission's reversal is one of the subjects of Bell Atlantic's current appeal of the First Report and Order.
 18. See Id. at 8970, ¶ 19.

In the Fourth Further Notice, the Commission states three characteristics that it deems essential to the development of the productivity offset: (1) the X-Factor must be economically meaningful; (2) the X-Factor should ensure that ongoing reductions in unit costs by the LECs are passed through to consumers; and (3) the X-Factor should be reasonably simple, and based on accessible and verifiable data.^{19/} Before addressing the specific issues the Commission has raised, BellSouth offers the following general observations.

■ **The Commission Should Not Place Undue Emphasis on "Unit Costs"**

In general, BellSouth believes that the Commission has focused too much on LEC unit costs rather than broader views of LEC productivity. Consumer welfare is increased not just by a reduction in unit costs, but also by efficient prices. BellSouth urges the Commission to recognize that the productivity offset, when applied uniformly to all of the indices and sub-indices that are presently included in the LEC price cap plan, is a very blunt instrument. In areas where competition has already driven prices to efficient levels, the continued application of a high, overall productivity offset can inhibit efficiency and damage competition.

■ **The Commission's Focus Should Not Be on Recapturing Past Productivity Gains**

The Commission should also recognize that it no longer has the ability to ensure that reductions in LEC unit costs are passed on to consumers. By reclassifying AT&T as "non-dominant," the Commission has given up any ability to pass-through LEC access charge reductions to consumers. If the IXC's engage in parallel pricing, LEC access charge reductions will simply inure to the benefit of the interexchange carriers and their shareholders, not consumers.

Thus, the Commission should place much more emphasis on enhancing future LEC productivity and efficiency, and much less on recapturing past LEC productivity gains. The Commission should focus on optimizing consumer welfare and reducing the cost of administering the

19. Fourth Further Notice at ¶ 16.

LEC price cap plan. It can do this by placing more emphasis on the first and third goals articulated in the Fourth Further Notice.

■ **Proposal for Accessible and Verifiable Data**

In pursuit of administrative simplicity, the Commission desires to rely on timely, publicly available data to calculate ongoing adjustments to the productivity offset. Through USTA, BellSouth has commissioned Christensen and Associates ("Christensen") to explore a means of replacing company proprietary data and data that is not available on a timely basis with publicly available data in the Christensen Total Factor Productivity ("TFP") methodology. In Attachment A to the USTA comments, Christensen presents a simplified TFP methodology that balances the Commission's goals of economic soundness and administrative simplicity.^{20/} Used in connection with USTA's proposal for a five-year rolling average of TFP to update the productivity offset, this methodology satisfies all three criteria set forth by the Commission.

2. TFP Methodology.

In the First Report and Order, the Commission concluded that it should adopt a new method of calculating the X-Factor in the LEC price cap plan. The Commission agreed with BellSouth, USTA and others that the productivity offset should be based on an industry-wide measure of performance.^{21/} The Commission tentatively concluded that the productivity offset should be based on a "moving average" TFP methodology developed by Christensen, finding it to be a "sound method of computing the X-Factor because it is designed to pass through to rate-payers the average

20. See Comments of the United States Telephone Association, CC Docket No. 94-1 (Dec. 18, 1995) ("USTA Comments"), Attachment A (demonstration of simplified TFP methodology prepared by Christensen and Associates).

21. First Report and Order, 10 FCC Rcd at 9026, ¶ 145.

efficiency gains achieved by the price-cap LECs as a whole, and because it creates incentives for all LECs to surpass the industry average in productivity gains from year to year."^{22/}

The Fourth Further Notice raises numerous issues regarding a TFP approach to calculating the X-Factor. The principal concern raised by the Commission with the Christensen TFP approach is that it might require "substantial resources" to implement.^{23/} As shown below and in the comments of USTA also being filed today, those concerns have been addressed in the Christensen "simplified" TFP model. Using this approach, there is no need for the Commission to consider other, less accurate methods that would function only as a less reliable proxy for the TFP approach.

In analyzing the TFP method, the Commission invites comment on virtually every aspect of the Christensen approach. In his attachment to the USTA comments, Dr. Christensen responds to each of the issues identified by the Commission in the Fourth Further Notice. BellSouth will not repeat those comments here. BellSouth does believe, however, that certain of the issues identified by the Commission require further discussion. These issues are addressed below.^{24/}

Issue 1a: *What is the most reasonable method to develop output price indices for TFP calculation purposes? What data sources should be used to develop output price indices?*

TFP is the ratio of an index of total outputs to an index of total inputs. Paragraph 28 of the Fourth Further Notice notes that the Christensen TFP model uses revenue shares to weight each service in the output quantity index. The Commission states that this assumption would be appropriate if all services were offered in fully competitive

22. Id. at 8968, ¶ 11; see Fourth Further Notice at ¶ 25 ("We tentatively concluded . . . that a TFP approach appeared ideally suited to determining the X-Factor") (citation omitted).

23. Fourth Further Notice at ¶ 25.

24. For those issues not addressed explicitly by BellSouth in these Comments, BellSouth concurs in the analysis of USTA presented in the USTA Comments and associated Attachments thereto.

markets, but states that LEC services face varying degrees of competition, and that LEC rates diverge in varying degrees from the cost of producing those services. The Commission therefore requests comment on whether a cost-based weighting scheme may be more appropriate in the application of TFP methods to the LEC industry.

BellSouth urges the Commission to reject the idea of implementing a cost-based weighting scheme in applying the TFP method. The process of developing economically meaningful cost-based weights would be extremely contentious and administratively complex.

Moreover, BellSouth notes that the price-cap LECs have been operating under price regulation for five years in the federal jurisdiction. One of the acknowledged benefits of price cap regulation is that it provides carriers with an unambiguous incentive to price their services efficiently in order to maximize its profits. As state public utility and service commissions continue to adopt price regulation plans in the intrastate jurisdiction, inefficiencies that are the residue of rate of return regulation may be expected to diminish.^{25/} Under the USTA proposal, the resulting improvements in efficiency will show up in the TFP studies as improved productivity, the benefits of which will be passed along to customers.^{26/}

25. Price cap regulation has been adopted in 33 states, representing over 80% of all local telephone lines. In the BellSouth region, 7 of 9 states have adopted price cap regulation.

26. BellSouth's primary customers for its interstate access services are IXC's. In order for the benefits of BellSouth's productivity improvements to reach end-user consumers, the IXC's must pass through BellSouth's price reductions to their customers. This has not always occurred in the past, and with the Commission's recent declaration of AT&T to be nondominant, cannot be assured to occur in the future.

Issue 1b: *What is the most appropriate measure of the cost of capital for a TFP study?*

The original Christensen TFP Study used Moody's Yield on Public Utility Bonds to measure changes in the cost of capital.^{27/} In the Fourth Further Notice, the Commission asks whether the prescribed rate of return for non-price cap LECs, or the 11.25 percent rate of return used to initialize the price cap rates of the price cap LECs, should be substituted as the cost of capital in the Christensen TFP methodology.^{28/}

In Attachment A to the USTA comments, Dr. Christensen provides a technical answer to this question, noting that to correctly measure changes in the cost of capital requires consideration of changes in both the debt and equity components.^{29/} The calculation of TFP must rely on a consistent time series that reflects an economically meaningful measure of changes in the opportunity cost of capital. Although this measure ideally would reflect a composite opportunity cost of capital which represents a weighted average of the opportunity cost of debt and the LEC's opportunity cost of equity, there is not, as a practical matter, any objective, publicly verifiable time series for changes in the LEC opportunity cost of equity. Thus, the simplified Christensen TFP calculation utilizes the changes in cost of capital implicit in the U.S. National Income and Product Accounts to reflect changes in the LEC cost of capital.^{30/}

27. See First Report and Order, 10 FCC Rcd at 9014, ¶ 116 n.191,

28. Fourth Further Notice at ¶ 35.

29. USTA Comments, Attachment A, at 10.

30. Id.; see USTA Comments at 17; Ex parte Affidavit of Dr. Laurits R. Christensen on behalf of the United States Telephone Association, CC Docket No. 94-1 (February 1, 1995).

The Commission's prescribed rate of return is irrelevant in any event. It does not represent an appropriate measure of changes in the economic opportunity cost of capital for use in a TFP study. Such prescribed returns change only in discrete steps at irregular intervals, while the U.S. economy's cost of capital changes continuously as market conditions change.^{31/}

More importantly, the prescribed rate is just one more tenuous link to past rate of return regulation. The Commission should assiduously avoid tying its improved price cap regulatory regime to the rate of return formula; it is in the public interest for the Commission to eliminate the vestiges of rate of return regulation from the LEC price cap plan, not to re-introduce them.

Issue 1c: *What are appropriate depreciation rates for a TFP study?*

In a similar vein, the Commission has asked whether the depreciation rates prescribed by the Commission for the price cap LECs should be used in a TFP study in lieu of the economic depreciation rates used by Christensen.^{32/} BellSouth once again urges the Commission to resist the urge to retain ties to cost-of-service regulation in its long-term LEC price cap plan.

As Dr. Christensen observes, it would be conceptually inappropriate to use depreciation rates other than economic depreciation rates in a TFP study.^{33/} The depreciation rates prescribed by the Commission vary substantially from economic depreciation rates, which is evidenced by (1) the fact that the largest LECs have written off

31. See USTA Comments at 18 and Attachment A at 11 - 12..

32. Fourth Further Notice at ¶¶ 37-40.

33. See USTA Comments at 19 - 21 & Attachment A at 12 - 14.

Inappropriate Addition to the LEC Price Cap Formula," filed on February 1, 1995. Dr. Christensen demonstrated there that over the 1948 to 1992 period, input prices for the U.S. economy and the telephone industry grew at almost the same rate. Statistical tests found there was no evidence that the input price trends differ for the U.S. economy for the full 1948-1992 period, or for the 1948-1984 and 1984-1992 subperiods. This means that any observed short-term differences in input price growth do not necessarily represent a difference in the underlying trend of input prices. There is therefore no statistical basis for using an observed short-term differential as a projection of future trends.^{35/}

Noting that it is considering calculation of a moving average X-Factor based on the TFP method, the Commission has also asked for comment on whether to include an input price differential based on input price differential data from the same period as the TFP study. The answer is no. Because of the extreme volatility of the input price differential data, such an addition would increase the volatility of the resulting X-Factor. The use of a

35. In the February 1, 1995 Affidavit, Dr. Christensen demonstrated that there was no statistical validity to the claim that there has been a structural change in the relationship between telephone industry and U.S. economy input prices. Although acknowledging that Dr. Christensen's numbers appeared "more consistent with a hypothesis of a zero percent long-run price differential," the Bush/Uretsky study stated that it could not accept Christensen's conclusion because the time series Christensen used was different from another time series used by NERA to reach the same conclusion. 10 FCC Rcd at 9225. On March 21, 1995, USTA submitted an ex parte filing where it explained the sources of the U.S. input price numbers and why they may differ between the NERA and Christensen data sets, which the Bush/Uretsky study inexplicably ignored. See USTA Ex Parte (March 21, 1995). In any event, however, Dr. Christensen has submitted a new study in connection with the USTA comments in this proceeding, which explains why the Commission was wrong in ignoring his conclusion as to the input price differential, and once again shows that there is no statistical basis for using an observed short-run input price growth differential as a projection of expected future trends. Because short-term differences in one direction tend to be offset by subsequent short-term differences in another direction, such as with the rise and subsequent fall of interest rates, the best estimate of the expected input price growth differential is given by the long-term differential of zero. See USTA Comments, Attachment A, Christensen Appendix 3.

billions of dollars of investment for SEC reporting purposes due to the historical inadequacy of regulated depreciation rates, and (2) the fact that regulators can no longer guarantee recovery of this investment in the future. The Commission should use economic depreciation rates in the calculation of TFP.

Embedding prescribed depreciation rates in the long-term price cap formula would also impede the elimination of unnecessary regulation of LEC depreciation rates. Both the pending federal legislation and the price cap plans recently adopted in many states eliminate regulation of carrier depreciation rates. The Commission should do likewise.

Issue 1i: *What is the most reasonable way to account for changes in LECs' input prices for use in a TFP approach to calculating the X-Factor?*

a. **Input Price Differential.**

In the First Report and Order, the Commission tentatively concluded that the X-Factor should include an adjustment to reflect changes in LEC input prices-- the so-called "input price differential." The Commission's tentative conclusion is grounded on a staff study, included as Appendix F to the First Report and Order.^{34/} BellSouth believes that there is significant statistical evidence which conflicts with the study's conclusions. BellSouth urges the Commission to consider the strong evidence submitted in this phase of the proceeding which demonstrates that there is no long-term need for an input price differential in the X-Factor.

First, in accordance with Paragraph 12 of the Fourth Further Notice, BellSouth hereby incorporates by reference the ex parte Affidavit filed by Dr. Laurits R. Christensen on behalf of the USTA entitled "An Input Price Adjustment Would be an

34. C. Anthony Bush and Mark Uretsky, "Input Prices and Total Factor Productivity," First Report and Order, Appendix F ("Bush/Uretsky Study").

five-year moving average would have a "smoothing" effect, but the X-Factor would still fluctuate much more widely than if the Commission were simply to accept the statistical evidence (as it should) that, in the long run, the differential is zero.

Both Christensen and NERA have re-confirmed their conclusions that, in the long run, the long term trend of the LEC and U.S. input price differential is zero and that the trend has not changed since divestiture.^{36/} Accordingly, no input price differential should be included in the price cap plan.

b. Direct Measurement of LECs' Unit Costs.

In Paragraph 61 of the Fourth Further Notice, the Commission seeks comment on adjusting the PCI based on a direct measurement of LEC unit cost growth, rather than by offsetting national inflation by an X-Factor. Under this approach, it would not be necessary to use GDP-PI (or any other measure of economy-wide inflation), U.S. TFP indices, or U.S. input price indices.^{37/} Such an approach is used by the Interstate Commerce Commission in regulating the railroad industry.

If the Commission seriously considers adopting the railroad model, then it must structure the plan to maintain the incentive structure that price cap regulation is designed to foster. This would require the use of industry average unit cost data averaged over a sufficiently long period of time, e.g., five years, to maintain incentives and to smooth out the volatility inherent in this approach. As the First Report and Order tentatively

36. See USTA Comments at 26 - 28 & Attachment A, Christensen Appendix 3; USTA Comments, Attachment C, NERA, "Economic Evaluation of Selected Issues from the Fourth Further Notice of Proposed Rulemaking in the LEC Price Cap Performance Review" (NERA Study), at 2 - 10.

37. Fourth Further Notice at ¶ 61.

concluded, a moving average of LEC performance data has many benefits, including elimination of the need for frequent performance reviews, and more important, elimination of the need for sharing as a means of ensuring that customers receive the benefits of LEC productivity gains.^{38/}

Issue 1j: *Is there a valid distinction between intrastate and interstate productivity for the purposes of calculating a TFP index and an input price index and, if so, does a satisfactory method exist to account for such differences?*

In the First Report and Order, the Commission found that interstate and intrastate services are largely provided over common facilities, and that the record contained no evidence of an economically meaningful way to divide and measure the facilities used for provision of intrastate services. The Commission therefore tentatively concluded that TFP should be calculated on a total company basis. The Commission's conclusion recognizes that input prices and demand that are "separated" between the state and interstate jurisdictions pursuant to Part 36 of the Commission's rules may not provide economically meaningful benchmarks for setting interstate price caps.^{39/}

In the Fourth Further Notice, the Commission raises once again the question of whether there is a valid distinction between intrastate and interstate productivity for purposes of calculating a TFP index, and whether there is a reasonable method of accounting for these differences. The Commission also asks whether Section 2(b) of the Communications Act of 1934 requires the use of jurisdictionally separated data to calculate an "interstate" TFP.

38. First Report and Order, 10 FCC Rcd at 9030, ¶ 153.

39. Fourth Further Notice at ¶ 63.

In implementing cost of service regulation, the Commission recognized that the jurisdictional separations process does not produce economic costs, and the Commission thus has always used total company data rolled up to an industry level to calculate the cost of capital. Likewise, in this case, there is no reason to assume that it would be any easier to measure "interstate" TFP than it is to measure the "interstate" cost of equity. The inputs of production of capital, labor and supplies are not governed by artificial "interstate" or "intrastate" boundaries. The LECs do not have "interstate" loops, "interstate" switches or "interstate" technicians. The factors of production are used in common for both interstate and intrastate services. Any attempt to separate these factors is inherently arbitrary and devoid of economic significance. The Commission should thus calculate TFP on a total company basis.

BellSouth does not believe that the use of a total company TFP methodology to adjust interstate price caps exceeds the Commission's jurisdiction under Section 2(b) of the Communications Act. The Communications Act contemplates carrier-initiated rates, and places the initial responsibility on the carriers to establish and maintain just and reasonable rates.^{40/} The Commission's regulatory oversight is exercised through its tariff review, suspension and rejection powers under Section 204 of the Act; its prescription powers under Section 205; and its authority to adjudicate private complaint proceedings under Sections 206-209.

The Commission prescribed the price cap mechanism under its Section 205 authority to augment its tariff review powers.^{41/} The Commission concluded that carrier

40. See 47 U.S.C. § 201.

41. LEC Price Cap Order, 5 FCC Rcd at 6836.

initiated tariffs that complied with the price cap requirements would be presumed to be just and reasonable and would be allowed to take effect without suspension unless the Commission determined that an investigation was warranted. The initial price cap rates were determined under cost of service regulation, and carriers were afforded limited pricing flexibility to evolve to a more efficient set of rates over time.^{42/}

TFP provides one economically meaningful input to the formula that determines how the price cap index adjusts over time. Neither the Commission's measurement of TFP, however, nor the Commission's specification of the price cap index, determines whether any particular tariff rate is lawful. Carriers must still defend the lawfulness of any particular rate when challenged. Thus, the use of total company TFP in the price cap formula does not determine the lawfulness of any particular interstate rate, and its use does not violate any limitation on the Commission's jurisdiction under Section 2(b) of the Act.

Similarly, the Commission should not be concerned about whether state commissions utilize TFP to set intrastate rates.^{43/} The FCC and the state commissions have never utilized common methodologies to set rates in their respective jurisdictions. Given the staggered pace at which competition is developing in various states, the states' individual reliance on price regulation and LEC productivity measures is correspondingly varied. As a conceptual matter, there is no reason to assume that a common ratemaking methodology is necessary for rates in each jurisdiction to be deemed "just and reasonable." Moreover, no matter what ratemaking method is employed, the FCC is only empowered to regulate

42. Id.

43. See Fourth Further Notice at ¶ 67.

interstate rates. It should do so on the basis of sound economic principles, and not on the basis of what the states may or may not do.^{44/}

There is no reason to alter existing monitoring reports or sharing mechanisms to reflect solely total company data, as suggested in Paragraph 68 of the Fourth Further Notice. If the Commission adopts the USTA TFP proposal, it should also use USTA's proposed "tariff review plan" to gather and display the data needed in the model.^{45/} This will meet the Commission's need for verifiable and auditable data from publicly available sources.

Finally, the Commission asks whether any of the Commission's monitoring or reporting requirements should be revised to reflect only total company data.^{46/} The answer is no. Although the Commission can and should eliminate unnecessary reporting requirements and data submissions, the Commission must still regulate interstate rates, and its reports should still contain jurisdictionally separated data. If the Commission adopts a "pure" price cap plan for the LECs, it should eliminate Form 492A as superfluous. The Commission should also streamline its regulation of LEC depreciation rates by adopting the "Price Cap Carrier Option" for the LECs that are subject to price cap regulation. Only if the Commission is assiduous in eliminating unnecessary regulatory burdens will the full benefits of price cap regulation be realized by the public.

44. As previously noted, price regulation has replaced cost of service regulation as the regulatory model in 33 states, and in the BellSouth region, 7 of 9 states have adopted price cap plans. Price cap regulation is under active consideration in the other two states -- Louisiana and South Carolina. Thus, any concern by the Commission about "mixing" cost of service and price regulation is largely moot.

45. The USTA filing includes a model tariff review plan for the Commission's consideration. See USTA Comments, Attachment B.

46. Fourth Further Notice at ¶ 68.

The Christensen simplified TFP model relies on data reported in the ARMIS 43-02 report. The Commission should continue to collect this data as long as price cap regulation of the LECs is required.

Issue 1k: *Is there a valid distinction between regulated and nonregulated productivity, or the productivity associated with specific services, such as video dialtone, or groups of services, for the purposes of calculating a TFP index and an input price index? If so, does a satisfactory method exist to account for such differences?*

The Commission seeks comment on whether it should seek to measure separately the productivity of regulated and non-regulated services. The Commission's concern is that failure to do so may create a perverse incentive for price cap LECs to engage in relatively less profitable business activities than they would otherwise, based on an expectation that losses in those businesses would lower their productivity growth (as measured by TFP), and thus might be offset in part by reductions in the X-Factor.^{47/}

In expressing this concern, the Commission has highlighted the very reason why price cap regulation must rely on a sufficiently broad base of companies, and a long enough period of time over which productivity can be measured meaningfully. Were the Commission to adopt a price cap plan that looked at individual company performance on a year-by-year basis, it would re-introduce the same perverse incentives for strategic behavior that were inherent in cost of service regulation, and that price regulation was designed to eliminate. As it stands, however, by looking to TFP on a longer term basis as the

47. Fourth Further Notice at ¶ 70.

Commission has proposed, the chance that strategic behavior would inure to the benefit of any price cap LEC is remote and not a significant issue.^{48/}

Issue 1l: *How do state and federal universal service and other subsidy programs implemented by the LECs affect the industry's TFP? Should the TFP be adjusted to account for such effects?*

The LEC price cap formula deals with changes in federal and state subsidy programs in the exogenous cost portion of the LEC price cap formula. It would be inappropriate to normalize the historical TFP calculation to reflect changes in these programs. To the extent that existing programs affect the LECs' TFP, their impact is already embedded in the historical TFP data, and it would be inappropriate to remove those impacts. Any future changes in these programs should result in an "exogenous" cost adjustment until the impact of the change is captured through the moving average TFP methodology.

Issue 1m: *Should the productivity of firms other than LECs be included in a TFP-based X-Factor calculation?*

During the first phase of this proceeding, Ad Hoc proposed to expand the universe of firms included in the TFP studies beyond the LECs to include IXC's, CAPs and other telecommunications service providers. Ad Hoc argued that a moving average X-Factor

48. A long term view of TFP helps minimize the possibility that whatever X-Factor is chosen lies within the ability of individual LECs to influence. If this is not the case, LECs then have a perverse incentive to engage in strategic behavior, because it can influence the "X" it will face in future periods by altering its current productivity performance. A long term measure of TFP solves this potential problem. See Comment of Frank M. Gollop, Ph.D., attached hereto as Attachment 1 ("Gollop Statement"), at 5.

based only on LEC data might encourage excessive network investment and re-introduce the kind of perverse "gold-plating" incentives that were inherent in rate of return regulation.^{49/} The Commission should reject these concerns.

The presence of perverse incentives to which Ad Hoc alludes would be possible only if the Commission were to adopt a poorly specified LEC price cap plan, such as one which based the X-Factor on individual company productivity measured over a short time span. If the Commission adopts its tentative conclusion to base TFP calculations on LEC industry-wide data, and utilizes a moving average over a number of years, the concerns expressed by Ad Hoc will be addressed.^{50/}

More broadly, the Commission must again recognize that price cap regulation of the LECs is an interim measure, and not a permanent regulatory scheme. Given the tremendous change taking place in the telecommunications marketplace and the transition structure the Commission has proposed to channel the price-cap LECs out of regulation altogether in the Pricing Flexibility Notice, the concerns expressed by Ad Hoc, and many of the concerns expressed in the Fourth Further Notice generally, are properly characterized as transitional issues.

49. See Fourth Further Notice at ¶ 73; Letter from Colleen Boothby, Counsel for Ad Hoc Telecommunications Users Committee to William F. Caton, Secretary, in CC Docket No. 94-1 (Feb. 2, 1995), at 17; First Report and Order, 10 FCC Rcd at ¶ 124.

50. See Gollop Statement at 5-8.